

PALM INTRANET

Day: Wednesday Date: 7/28/2004 Time: 07:48:32

Inventor Name Search Result

Your Search was:

Last Name = MILLER First Name = DUANE

Application#	Patent#	Status	Date Filed	Title	Inventor Name 51
60555803	Not Issued	020	03/24/2004	ANALOGS EXHIBITING INHIBITION OF CELL PROLIFERATION AND THEIR USE IN TREATING DISEASES	MILLER, DUANE D.
60543724	Not Issued	020	02/11/2004	SYNTHETIC PHOSPHOLIPID SKT INHIBITORS FOR CENCER	MILLER, DUANE D.
60543712	Not Issued	020	02/11/2004	CONFORMATIONALLY RESTRICTED SELECTIVE ANDROGEN RECEPTOR MODULATORS	MILLER, DUANE D.
60529573	Not Issued	018	12/16/2003	PRODRUGS OF SELECTIVE ANDROGEN RECEPTOR MODULATORS AND METHODS OF USE THEREOF	MILLER, DUANE D.
60523079	Not Issued	020	11/18/2003	THIAZOLIDINONE AMIDES, THIAZOLIDINE CARBOXYLIC ACID AMIDES, METHODS OF MAKING, AND USE THEREOF	MILLER, DUANE D.
<u>60511071</u>	Not Issued	020	10/15/2003	ANTI-CANCER COMPOUNDS AND METHODS OF USE THEREOF	MILLER, DUANE D.
60510138	Not Issued	020	10/14/2003	TREATING BONE-RELATED DISORDERS WITH SELECTIVE ANDROGEN RECEPTOR MODULATORS	MILLER, DUANE D.
60509971	Not Issued	020	10/09/2003	LPA RECEPTOR AGONISTS AND ANTAGONISTS AND METHODS OF USE	MILLER, DUANE D.
60453736	Not Issued	159	02/28/2002	SELECTIVE ANDROGEN RECEPTOR MODULATORS AND METHODS OF USE THEREOF	MILLER, DUANE D.
60453704	Not Issued	159	02/28/2002	SELECTIVE ANDROGEN RECEPTOR MODULATORS AND	MILLER, DUANE D.

				METHODS OF USE THEREOF	
60418336	Not Issued	159	10/16/2002	TREATING ANDROGEN DECLINE IN AGING MALE (ADAM)-ASSOCIATED CONDITIONS WITH SARMS	MILLER, DUANE D.
60418229	Not Issued	159	10/15/2002	TREATING OBESITY WITH SELECTIVE ANDROGEN RECEPTOR MODULATORS	MILLER, DUANE D.
60418192	Not Issued	159	10/15/2002	TREATING ANDROGEN DECLINE IN AGING MALE (ADAM)-ASSOCIATED CONDITIONS WITH SARMS	MILLER, DUANE D.
60418173	Not Issued	159	10/15/2002	HETEROCYCLIC SELECTIVE ANDROGEN RECEPTOR MODULATORS AND METHODS OF USE THEREOF	MILLER, DUANE D
60418166	Not Issued	159	10/15/2002	METHYLENE-BRIDGED SELECTIVE ANDROGEN RECEPTOR MODULATORS AND METHODS OF USE THEREOF	MILLER, DUANE D.
60367355	Not Issued	159	08/24/2000	SELECTIVE ANDROGEN RECEPTOR MODULATORS AND METHODS OF USE THEREOF	MILLER, DUANE D.
60363952	Not Issued	159	03/13/2002	SUBSTITUTED TETRAHYDROISOQUINOLINE AND USE THEREOF TO INHIBIT GLIOMA AND/OR GLIOBLASTOMA GROWTH	MILLER, DUANE D.
60354300	Not Issued	159	02/07/2002	TREATING BENIGN PROSTATE HYPERPLASIA WITH SARMS	MILLER, DUANE D.
<u>60336185</u>	Not Issued	159	12/06/2001	TREATING CHRONIC MUSCLE WASTING WITH SARMS	MILLER, DUANE
60311320	Not Issued	159	08/10/2001	NOVEL ALPHA-ADRENERGIC ANTAGONISTS	MILLER, DUANE D.
60300083	Not Issued	159	06/25/2001	SELECTIVE ANDROGEN RECEPTOR MODULATORS AND METHODS OF USE THEREOF	MILLER, DUANE D.
60285218	Not Issued	159	04/20/2001	COMPOSITIONS CONTAINING LYSOPHOSPHOTIDIC ACIDS WHICH INHIBIT APOPTOSIS, METHODS OF MAKING THE COMPOSITIONS AND USES THEREOF	MILLER, DUANE D.
<u>60278181</u>	Not Issued	159		YOHIMBINE DIMERS EXHIBITING BINDING SELECTIVITY FOR	MILLER, DUANE D.

				HUMAN ALPHA2A- VERSUS ALPHA2B- ADRENERGIC RECEPTORS	700000000000000000000000000000000000000
60265269	Not Issued	159	01/30/2001	INTERNET PRINT GUIDE	MILLER, DUANE
<u>60243748</u>	Not Issued	159	10/30/2000	METHOD AND APPARATUS FOR INDEXING, SEARCHING, DISTRIBUTING, AND MANAGING MULTIMEDIA RESOURCES	MILLER, DUANE
60193168	Not Issued	159	03/29/2000	B3-ADRENORECEPTOR AGONISTS, AGONIST COMPOSITIONS AND METHODS OF MAKING AND USING THE SAME	MILLER, DUANE D.
60190370	Not Issued	159	03/17/2000	SYNTHETIC LYSOPHOSPHATIDIC ACID (LPA) RECEPTOR AGONISTS AND ANTAGONISTS AND USES THEREOF	
10849039	Not Issued	019	05/20/2004	METABOLITES OF SELECTIVE ANDROGEN RECEPTOR MODULATORS AND METHODS OF USE THEREOF	MILLER, DUANE D.
10809757	Not Issued	030	03/25/2004	REAL-TIME POLYMERASE CHAIN REACTION-BASED GENOTYPING ASSAY FOR SINGLE NUCLEOTIDE POLYMORPHISM	DUANE
10800021	Not Issued	019	03/15/2004	METHOD FOR DETECTING SELECTIVE ANDROGEN RECEPTOR MODULATORS	MILLER, DUANE D.
<u>10760152</u>	Not Issued	019	01/20/2004	METHOD OF TREATING BREAST CANCER WITH ANDROGEN RECEPTOR ANTAGONISTS	MILLER, DUANE D.
10759538	Not Issued	019	01/20/2004	TREATING ANDROGEN DEFICIENCY IN FEMALE (ADIF)-ASSOCIATED CONDITIONS WITH SARMS	MILLER, DUANE D.
<u>10754626</u>	Not Issued	019	01/12/2004	LARGE-SCALE SYNTHESIS OF SELECTIVE ANDROGEN RECEPTOR MODULATORS	MILLER, DUANE D.
10684582	Not Issued	019	10/15/2003	1	MILLER, DUANE D.
10683160	Not Issued	019	10/14/2003	TREATING OBESITY WITH SELECTIVE ANDROGEN RECEPTOR MODULATORS	MILLER, DUANE D.

<u>10683157</u>	Not Issued	030	10/14/2003	METHYLENE-BRIDGED SELECTIVE ANDROGEN RECEPTOR MODULATORS AND METHODS OF USE THEREOF	MILLER, DUANE D.
10683156	Not Issued	020	10/14/2003	METHOD FOR DETECTING SELECTIVE ANDROGEN RECEPTOR MODULATORS	MILLER, DUANE D.
<u>10683125</u>	Not Issued	020	10/14/2003	HETEROCYCLIC SELECTIVE ANDROGEN RECEPTOR MODULATORS AND METHODS OF USE THEREOF	MILLER, DUANE D.
<u>10679722</u>	Not Issued	030	10/06/2003	YOHIMBINE DIMERS EXHIBITING BINDING SELECTIVITIES FOR ALPHA2 ADRENERGIC RECEPTORS	MILLER, DUANE D.
10270263	Not Issued	160	10/15/2002	SELECTIVE ANDROGEN RECEPTOR MODULATORS AND METHODS OF USE THEREOF	MILLER, DUANE D.
10269438	6596734	150	10/11/2002	TETRAHYDROISOQUINOLINE COMPOUNDS FOR USE AS BETA3-ADRENORECEPTOR AGONISTS	MILLER, DUANE D.
<u>10215547</u>	Not Issued	041	08/09/2002	NOVEL ALPHA ADRENERGIC AGENTS	MILLER, DUANE D.
<u>10149953</u>	6593341	150	06/17/2002	BETA3-ADRENORECEPTOR AGONISTS, AGONIST COMPOSITIONS AND METHODS OF MAKING AND USING THE SAME	MILLER, DUANE D.
<u>09953686</u>	Not- Issued	061	09/17/2001	LPA RECEPTOR AGONISTS AND ANTAGONISTS AND METHODS OF USE	MILLER, DUANE D.
09935045	6569896	150	08/23/2001	SELECTIVE ANDROGEN RECEPTOR MODULATORS AND METHODS OF USE THEREOF	MILLER, DUANE D.
09935044	6492554	150	08/23/2001	SELECTIVE ANDROGEN RECEPTOR MODULATORS AND METHODS OF USE THEREOF	MILLER, DUANE D
09923253	6710346	150	08/02/2001	ACTIVE INFRARED PRESENCE SENSOR	MILLER, DUANE SCOTT
09811838	Not Issued	120	03/19/2001	LPA RECEPTOR AGONISTS AND ANTAGONISTS AND METHODS OF USE	MILLER, DUANE D.
09708090	Not	161	11/08/2000	NON-STEROIDAL AGONIST	MILLER,

10270732	Not Issued	041	10/16/2002	SELECTIVE ANDROGEN RECEPTOR MODULATORS AND METHODS OF USE THEREOF	MILLER, DUANE D.
10270233	Not Issued	030	10/15/2002	SELECTIVE ANDROGEN RECEPTOR MODULATORS AND METHODS OF USE THEREOF	MILLER, DUANE D.
10270232	Not Issued	071	10/15/2002	FORMULATIONS COMPRISING SELECTIVE ANDROGEN RECEPTOR MODULATORS	MILLER, DUANE D.
10106521	6638943	150	03/25/2002	YOHIMBINE DIMERS EXHIBITING BINDING SELECTIVITIES FOR ALPHA2 ADRENERGIC RECEPTORS	MILLER, DUANE D.
09461543	Not Issued	161	12/15/1999	NON-STEROIDAL RADIOLABELED AGONIST/ANTAGONIST COMPOUNDS AND THEIR USE IN PROSTATE CANCER IMAGING	MILLER , DUANE D.
09090425	6019957	150	06/04/1998	NON-STEROIDAL RADIOLABELED AGONIST/ANTAGONIST COMPOUNDS AND THEIR USE IN PROSTATE CANCER IMAGING	MILLER , DUANE D.
09086699	6160011	150	05/29/1998	NON-STEROIDAL AGONIST COMPOUNDS AND THEIR USE IN MALE HORMONE THERAPY	MILLER , DUANE D.
08998259	5997252	150	12/24/1997	WIND DRIVEN ELECTRICAL POWER GENERATING APPARATUS	MILLER, DUANE G.
08978511	6071957	150	11/25/1997	IRREVERSIBLE NON-STEROIDAL ANTAGONIST COMPOUND AND ITS USE IN THE TREATMENT OF PROSTATE CANCER	MILLER , DUANE D.
08617370	Not Issued	161	03/18/1996	DRUGS FOR THE TREATMENT OF CARDIAC ARREST AND OTHER SHOCK STATES	MILLER , DUANE D.
08312665	5527830	150	09/26/1994	DRUGS FOR THE TREATMENT OF CARDIAC ARREST AND OTHER SHOCK STATES	MILLER , DUANE D.
<u>08214351</u>	Not Issued	161	03/15/1994	AMPA ANTAGONISTS	MILLER , DUANE D.
<u>08119661</u>	Not Issued	166	09/13/1993	DRUGS FOR THE TREATMENT OF CARDIAC ARREST AND OTHER SHOCK STATES	MILLER , DUANE D.
07816643	Not	161	01/02/1992	FOUR WHEEL VEHICLE WITH	MILLER,

,	Issued			COMPOUNDS AND THEIR USE IN MALE HORMONE THERAPY	DUANE D.
<u>09580640</u>	Not ' Issued	161	05/30/2000	PROTECTOR PLATE	MILLER, DUANE J.
<u>09510108</u>	6482861	150		IRREVERSIBLE NON-STEROIDAL ANTAGONIST COMPOUND AND ITS USE IN THE TREATMENT OF PROSTATE CANCER	MILLER, DUANE D

Search and Display More Records.

	Last Name	First Name
Search Another:	Miller	Duane
Inventor		Search

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10/679,722

STW-STRUCTURE SEARCH 7.28-04

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L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:932559 CAPLUS

DOCUMENT NUMBER:

139:17118

TITLE:

Yohimbine dimers exhibiting selectivity for the human

α2c-adrenoceptor subtype

AUTHOR(S):

Lalchandani, Shilpa G.; Lei, Longping; Zheng, Weiping; Suni, Mustafa M.; Moore, Bob M.; Liggett, Stephen B.;

Miller, Duane D.; Feller, Dennis R.

CORPORATE SOURCE:

Department of Pharmacology, University of Mississippi,

University, MS, USA

SOURCE:

Journal of Pharmacology and Experimental Therapeutics

(2002), 303(3), 979-984

CODEN: JPETAB; ISSN: 0022-3565

PUBLISHER:

American Society for Pharmacology and Experimental

Therapeutics

DOCUMENT TYPE: LANGUAGE:

Journal English

Yohimbine is a potent and selective $\alpha 2$ - vs. $\alpha 1$ -adrenoceptor antagonist. To date, drugs with high specificity for the $\alpha 2$ -adrenoceptor show marginal selectivity among the three $\alpha 2$ -adrenoceptor subtypes. Initial studies showed that yohimbine was about 4- and 15-fold more selective for the human $\alpha 2C$ -adrenoceptor in comparison with the $\alpha 2A$ - and $\alpha 2B$ -adrenoceptors, resp. To improve on this $\alpha 2$ -adrenoceptor subtype selectivity, a series of yohimbine dimers (varying from n = 2 to 24 spacer atoms) were prepared and evaluated for receptor binding on human $\alpha 2$ -adrenoceptor subtypes expressed in Chinese hamster ovary cells. Each dimeric analog showed higher affinities for $\alpha 2A$ - and $\alpha 2C$ -adrenoceptor vs. the α 2B-adrenoceptor; and yohimbine dimers with spacers of n = 2, 3, 4, 18, and 24 exhibited selectivity for the $\alpha 2C$ -adrenoceptor. The yohimbine dimers n=3 and n=24 showed the highest potency and selectivity (32- and 82-fold. resp.) for the $\alpha 2C$ -adrenoceptor in receptor binding and in functional studies (42- and 29-fold, resp.) measuring cAMP changes using a cell-based luciferase reporter gene assay. The dimers (n = 3 and n = 24) had high selectivity (>1000-fold) for the $\alpha 2C$ -adrenoceptor compared with the three $\alpha 1$ -adrenoceptor subtypes. These findings demonstrate that the addition of spacer linkages to bivalent yohimbine mols. provides a successful approach to the development of ligands that are potent and highly selective for the α 2C-adrenoceptor.

IT 538357-71-0 538357-72-1 538357-73-2

538357-74-3 538357-75-4 538357-76-5

538357-77-6 538357-78-7 538357-79-8

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(yohimbine dimers exhibiting selectivity for human α2c-

adrenoceptor subtype)

RN 538357-71-0 CAPLUS

CN Yohimban-16-carboxamide, N,N'-1,2-ethanediylbis[17-hydroxy-, $(16\alpha,17\alpha)-(16'\alpha,17'\alpha)-(9CI)$ (CA INDEX NAME)

538357-72-1 CAPLUS RNCN

Yohimban-16-carboxamide, N,N'-1,3-propanediylbis[17-hydroxy-, $(16\alpha,17\alpha)-(16'\alpha,17'\alpha)-$ (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 538357-73-2 CAPLUS

Yohimban-16-carboxamide, N,N'-1,4-butanediylbis[17-hydroxy-, $(16\alpha,17\alpha)$ - $(16'\alpha,17'\alpha)$ - (9CI) (CA INDEX NAME) CN

0/679,722

ANSWER 2 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:754163 CAPLUS

137:263224 DOCUMENT NUMBER:

Yohimbine dimers exhibiting binding selectivities for TITLE:

α2 adrenergic receptors

Miller, Duane D.; Zheng, Weiping; Moore, Robert M., INVENTOR(S):

II; Mustafa, Suni

The University of Tennessee Research Corporation, USA PATENT ASSIGNEE(S):

PCT Int. Appl., 43 pp. SOURCE:

CODEN: PIXXD2

Patent DOCUMENT TYPE:

English LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.			KI	ND	DATE			APPLICATION NO.						DATE				
WO	0 2002076399		A	2	20021003			WO 2002-US9267					20020325					
WO	2002	2076399		A3		20021114												
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
		UA,	UG,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,	
		CY,	DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
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US	6638	943		В	2	2003	1028											
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PRIO

OTHER SOURCE(S): MARPAT 137:263224

GT

The yohimbine dimer compds. I (R = linker mol. having a length of 2.5 AΒ Å to about 45 Å) were prepared as an $\alpha 2$ -AR antagonist and has selectivity of an $\alpha 2$ -AR subtype over another $\alpha 2$ -AR subtype. Thus, yohimbinic acid was treated with H2NCH2CH2NH2 to give I (R = CH2CH2).HCl. The binding affinity (Ki) of I (R = CH2CH2).HCl on human α 2a-AR was 26.4 \pm 7.3 and α 2b-AR was 1510 \pm 262 with a $\alpha 2a/\alpha 2b$ selectivity of 57.2.

Ι

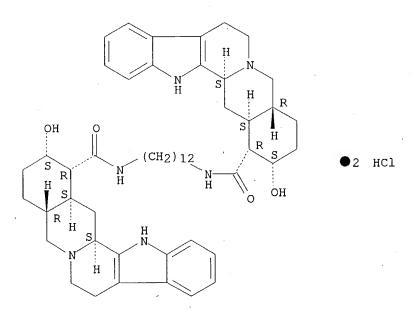
IT 269745-09-7P 269745-10-0P 269745-11-1P 269745-12-2P 269745-13-3P 269745-14-4P 269745-15-5P 269745-16-6P 269745-17-7P 269745-18-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

RN 269745-18-8 CAPLUS

CN Yohimban-16-carboxamide, N,N'-1,12-dodecanediylbis[17-hydroxy-, dihydrochloride, $(16\alpha,17\alpha)-(16'\alpha,17'\alpha)-$ (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:235082 CAPLUS

DOCUMENT NUMBER: 132:347779

TITLE: Yohimbine dimers exhibiting binding selectivities for

human $\alpha 2a$ - versus $\alpha 2b$ - adrenergic

receptors

AUTHOR(S): Zheng, Weiping; Lei, Longping; Lalchandani, Shilpa; Sun, Guoping; Feller, Dennis R.; Miller, Duane D.

10/679,722

CORPORATE SOURCE:

Department of Pharmaceutical Sciences, University of

Tennessee, Memphis, TN, 38163, USA

SOURCE:

Bioorganic & Medicinal Chemistry Letters (2000),

10(7), 627-630

CODEN: BMCLE8; ISSN: 0960-894X

Elsevier Science Ltd.

PUBLISHER: DOCUMENT TYPE:

TISEVIEL SC.

LANGUAGE:

Journal English

GI

2 HCl

N-H

H

CONH (CH₂) nNH CO

H

OH

H

I

AB A series of yohimbine dimers was prepared and evaluated at the human $\alpha 2a$ - and $\alpha 2b$ -adrenergic receptors (ARs) expressed in Chinese hamster ovary (CHO) cells. All dimers display higher binding selectivities for $\alpha 2a$ vs. $\alpha 2b$ subtype than yohimbine, and four compds. I (n = 5, 6, 8, 10) represent the most potent and $\alpha 2a$ - vs. $\alpha 2b$ -AR selective ligands identified so far.

IT 269745-09-7P 269745-10-0P 269745-11-1P 269745-12-2P 269745-13-3P 269745-14-4P

269745-15-5P 269745-16-6P 269745-17-7P

269745-18-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of yohimbine dimers and their binding affinities on human $\alpha 2a-$ and $\alpha 2b-adrenergic receptors)$

RN 269745-09-7 CAPLUS

CN Yohimban-16-carboxamide, N,N'-1,2-ethanediylbis[17-hydroxy-, dihydrochloride, $(16\alpha,17\alpha)-(16'\alpha,17'\alpha)-(9CI)$ (CA INDEX NAME)

269745-18-8 CAPLUS RN

Yohimban-16-carboxamide, N,N'-1,12-dodecanediylbis[17-hydroxy-, CNdihydrochloride, $(16\alpha, 17\alpha) - (16'\alpha, 17'\alpha) - (9CI)$ (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS 41 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

COPYRIGHT 2004 ACS on STN CAPLUS L4ANSWER 4 OF 6

1999:736398 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

132:45085

Characterization of a new radioiodinated probe for the TITLE:

 $\alpha 2\text{C}$ adrenoceptor in the mouse brain

Dossin, Olivier; Mouledous, Lionel; Baudry, Xavier; AUTHOR(S):

Tafani, Jean-Andre-Mathieu; Mazarquil, Honore; Zajac,

Jean-Marie

CORPORATE SOURCE:

Institut de Pharmacologie et de Biologie Structurale,

CNRS UPR 9062, Toulouse, 31077, Fr.

SOURCE:

Neurochemistry International (1999), Volume Date 2000,

36(1), 7-18

CODEN: NEUIDS; ISSN: 0197-0186

Elsevier Science Ltd.

DOCUMENT TYPE:

Journal English

PUBLISHER: LANGUAGE:

> [125I] 17α -hydroxy- 20α -yohimban- 16β -(N-4hydroxyphenethyl)carboxamide or [1251]rauwolscine-OHPC, a new radioiodinated probe derived from rauwolscine was synthesized and its binding characteristics investigated on sections of the mouse caudate putamen. [125I] rauwolscine-OHPC binding was saturable and revealed interaction with a single class of binding sites (KD = 0.171 nM, Bmax = 3082 pCi/mg of tissue). The kinetically derived affinity was in close agreement with the affinity evaluated by saturation expts.: k-1/k+1 (0.0403 min-1/114 106 M-1 min-1) = 0.35 nM. Competition studies revealed interaction with one single class of binding sites for each of the twelve compds. tested. The rank of potency suggested an interaction with α2 adrenoceptors (atipamezole ≥ RX 821002 > yohimbine > (-)epinephrine). Moreover, the good affinity of [1251] rauwolscine-OHPC binding sites for spiroxatrine, yohimbine, WB 4101, the relatively good affinity for prazosin (Ki = 37.4 nM) and the affinity ratio prazosin/oxymetazoline (37.4/43.4=0.86) were consistent with an $\alpha 2C$ selective labeling of [1251] rauwolscine-OHPC. The distribution of [125I] rauwolscine-OHPC binding sites in mouse brain was characterized by autoradiog. The d. of binding sites was high in the islands of Calleja, accumbens nucleus, caudate putamen and olfactory tubercles, moderate in the hippocampus, amygdala and anterodorsal nucleus of the thalamus. These findings demonstrated that [125I] rauwolscine-OHPC is a useful

radioiodinated probe to label $\alpha 2C$ adrenoceptors in mouse brain. ΙT 252878-60-7

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (synthesis and characterization of new radioiodinated probe for α2C adrenoceptor in mouse brain)

252878-60-7. CAPLUS RN

CNYohimban-16-carboxamide, 17-hydroxy-N-[2-[4-hydroxy-3-(iodo-125I) phenyl] ethyl] -, $(16\beta, 17\alpha, 20\alpha)$ - (9CI) (CA INDEX

IT 252878-59-4P

RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses) (synthesis and characterization of new radioiodinated probe for α2C adrenoceptor in mouse brain)

RN 252878-59-4 CAPLUS

CN Yohimban-16-carboxamide, 17-hydroxy-N-[2-(4-hydroxyphenyl)ethyl]-, $(16\beta,17\alpha,20\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN ACCESSION NUMBER: 1987:594384 CAPLUS

DOCUMENT NUMBER:

CORPORATE SOURCE:

107:194384

TITLE:

Purification of the $\alpha 2$ -adrenergic receptor from porcine brain using a yohimbine-agarose affinity

AUTHOR(S):

Repaske, Mary G.; Nunnari, Jodi M.; Limbird, Lee E. Dep. Pharmacol., Vanderbilt Univ., Nashville, TN,

37232, USA

SOURCE:

Journal of Biological Chemistry (1987), 262(25),

12381-6

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE:

Journal English

LANGUAGE:

The $\alpha 2$ -adrenergic receptors were solubilized from porcine brain particulate prepns. by sequential extraction into Na cholate- and digitonin-containing buffers. The $\alpha 2$ -adrenergic receptors in the digitonin extract were identified by using the $\alpha 2$ -adrenergic selective antagonist. [3H] yohimbine and demonstrated the same specificity for interaction with adrenergic ligands as did the receptors in particulate prepns. Extraction into digitonin-containing buffers eliminated the modulation of

receptor-agonist interactions by guanine nucleotides, but not by monovalent cations. A novel affinity resin, yohimbine-agarose, was synthesized and used for purification of $\alpha 2$ -adrenergic receptors. using 2 sequential yohimbine-agarose affinity chromatog. steps, digitonin-solubilized lpha 2-adrenergic receptors from porcine brain cortex were purified to homogeneity as assessed by radioiodination and Ag stain anal. of these prepns. on SDS-PAGE. The purified α 2-adrenergic receptor has an approx. Mr = 65,000, as determined by photolabeling of the adrenergic ligand-binding subunit. The yohimbine-agarose affinity resin should be useful for purifying quantities of receptor sufficient for studies of receptor structure and functions.

IT 111018-62-3P

RL: PREP (Preparation)

(preparation of, as stationary phase for $\alpha 2$ -adrenergic receptor purification by affinity chromatog.)

RN 111018-62-3 CAPLUS

Agarose, $[3-[[3-[[(16\alpha,17\alpha)-17-hydroxyyohimban-16-$ CN yl]carbonyl]amino]propyl]amino]propyl]carbamimidate (9CI) (CA INDEX NAME)

CM 1

CRN 173761-30-3 C27 H40 N6 O3 CMF

$$HO-C-NH-(CH_2)_3-NH-(CH_2)_3-NH-C$$
 \parallel
 NH
 O
 OH

CM

9012-36-6 CRN

CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

ANSWER 6 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1986:403033 CAPLUS

DOCUMENT NUMBER:

105:3033

TITLE:

Synthesis and characterization of a high affinity

radioiodinated probe for the α 2-adrenergic

receptor

AUTHOR(S):

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Graham, Robert M.; Homcy, Charles J.

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SOURCE:

Molecular Pharmacology (1986), 29(3), 219-27

CODEN: MOPMA3; ISSN: 0026-895X

DOCUMENT TYPE:

Journal LANGUAGE: English

The synthesis and characterization are described of functionalized derivs. of the selective $\alpha 2$ -adrenergic antagonists, rauwolscine and yohimbine, which can be radiolabeled to high specific activity with 125I. Following demethylation of rauwolscine or yohimbine, the resultant carboxylic acid derivs. were reacted with 4-aminophenethylamine to yield the resp. 4-aminophenethyl carboxamides, 17α -hydroxy- 20α yohimban- 16β -[N-4-amino-phenethyl]carboxamide (rau-pAPC) and 17α -hydroxy-20 β -yohimban-16 α [N-4aminophenethyl]carboxamide. In competitive inhibition studies using rat renal membranes and the radioligand [3H] rauwolscine, rau-pAPC (Ki = 11 nM) exhibited a 14-fold greater affinity than the corresponding yohimbine derivative (Ki = 136 nM). The higher affinity compound, rau-pAPC, was radioiodinated by the chloramine T method, and the product, 125I-rau-pAPC $[17\alpha-hydroxy-20\alpha-yohimban-16\beta-(N-4-amino-3-$ [125i]iodophenethyl)carboxamide], was purified by reversed-phase HPLC to high specific activity (2175 Ci/mmol) and its binding characteristics were investigated in rat kidney membranes. Specific binding of 125I-rau-pAPC was saturable and of high affinity as determined by Scatchard anal. (KD = 1.8nM) or from kinetic studies (KD = $k2/k1 = 0.056 \text{ min}-1/4.3 \pm 0.2 + 0.056 \text{ min}-1/4.3 \pm 0.056 \text{ m$ 107 M-1 min-1 = 1.3 nM). In competition studies, α -adrenergic antagonists and agonists inhibited the binding of 125I-rau-pAPC with a potency order consistent with an interaction at $\alpha 2$ -adrenergic receptors (rauwolscine > phentolamine > prazosin; clonidine > (-)-epinephrine > (-)-norepinephrine > dopamine > (+)-epinephrine). rat liver and human platelet membranes, high affinity binding of 125I-rau-pAPC was also observed (liver, KD = 1.2 nM; platelet, KD = 3.2 nM). In addition, the d. of $\alpha 2$ -adrenergic receptors identified from binding studies with 125I-rau-pAPC in kidney, liver, and platelet membranes was similar to that observed in parallel studies with [3H] rauwolscine. findings indicate that 125I-rau-pAPC is a high affinity probe that selectively identifies $\alpha 2$ -adrenergic binding sites. Availability of this radioligand should facilitate the localization and biochem. characterization of this α -adrenergic receptor subtype.

IT 102606-25-7P 102606-26-8P 102679-82-3P

RL: PREP (Preparation)

(preparation of, as probe for adrenergic receptors)

RN 102606-25-7 CAPLUS

CN Yohimban-16-carboxamide, N-[2-(4-aminophenyl)ethyl]-17-hydroxy-, $(16\beta, 17\alpha, 20\alpha)$ – (9CI) (CA INDEX NAME)

RN 102606-26-8 CAPLUS
CN Yohimban-16-carboxamide, N-[2-[4-amino-3-(iodo-125I)phenyl]ethyl]-17hydroxy-, (16β,17α,20α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 102679-82-3 CAPLUS CN Yohimban-16-carboxamide, N-[2-(4-aminophenyl)ethyl]-17-hydroxy-, $(16\alpha,17\alpha)$ - (9CI) (CA INDEX NAME)

=> d his

(FILE 'HOME' ENTERED AT 08:06:58 ON 28 JUL 2004)

FILE 'REGISTRY' ENTERED AT 08:07:04 ON 28 JUL 2004

L1 STRUCTURE UPLOADED

L2 2 S L1

L3 26 S L1 FULL

FILE 'CAPLUS' ENTERED AT 08:07:38 ON 28 JUL 2004

L4 6 S L3

=> d 11

L1 HAS NO ANSWERS

L1 STR

Structure attributes must be viewed using STN Express query preparation.

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